

# EXHIBIT 2

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

5 ASETEK DANMARK A/S, )  
6 Plaintiff and )  
7 Counter-Defendant, )  
8 vs. ) Case No. 3:19-cv-00410-EMC  
9 COOLIT SYSTEMS, INC., )  
10 Defendant and )  
11 Counter-Claimant. )  
12 COOLIT SYSTEMS USA INC., )  
13 COOLIT SYSTEMS ASIA PACIFIC )  
14 LIMITED, COOLIT SYSTEMS )  
15 (SHENZHEN) CO., LTD., )  
16 Defendants, )  
17 COSAIR GAMING INC., and )  
18 CORSAIR MEMORY INC., )  
19 Defendants. )

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY  
DEPOSITION OF DAVID TUCKERMAN, Ph.D.  
MONDAY, DECEMBER 20, 2021

Reported Remotely and Stenographically by:  
JANIS JENNINGS, CSR No. 3942, CLR, CCRR  
Job No. 4997330

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REMOTE DEPOSITION OF DAVID TUCKERMAN, Ph.D., located in Lake Stevens, Washington, taken on behalf of the Defendants and Counter-Claimants CoolIT entities and Corsair entities, beginning at 9:05 a.m., on Monday, December 20, 2021, sworn remotely by Janis Jennings, Certified Shorthand Reporter No. 3942, CLR, CCRR, located in the City of Walnut Creek, County of Contra Costa, State of California.

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1 MONDAY, DECEMBER 20, 2021; 9:05 A.M.  
2  
3 09:05  
4 THE VIDEOGRAPHER: Good morning. We are 09:05  
5 going on the record at 9:05 a.m. on December 20, 09:05  
6 2021. This is media unit 1 of the video recorded 09:05  
7 deposition of Dr. David Tuckerman taken by counsel 09:05  
8 in the matter of Asetek Danmark A/S versus CoolIT 09:06  
9 Systems Incorporated and all related cross actions 09:06  
10 filed in the U.S. District Court for the Northern 09:06  
11 District of California, case number 09:06  
12 3:19-cv-00410-EMC. 09:06  
13  
14 This deposition is being held by Veritext 09:06  
15 Virtual via Zoom web conferencing. My name is Soseh 09:06  
16 Kevorkian from the firm Veritext and I'm the 09:06  
17 videographer. Our court reporter is Janis Jennings 09:06  
18 also from the firm Veritext. 09:06  
19  
20 At this time will counsel and all present 09:06  
21 please identify themselves for the record. 09:06  
22  
23 MR. CHEN: Absolutely. Arpita, would you 09:06  
24 like to start. 09:06  
25 MS. BHATTACHARYYA: Sure. Arpita 09:06  
Bhattacharyya from the Finnegan Law Firm here with 09:06  
Dr. David Tuckerman. 09:07  
MR. CHEN: And this is Reuben Chen from -- 09:07

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1 MS. BHATTACHARYYA: And -- and -- sorry. Go 09:07  
2 ahead, Rueben. I wanted to add that I'm here on 09:07  
3 behalf of the plaintiff Asetek Danmark A/S. 09:07  
4 MR. CHEN: Thank you. This is Rueben Chen 09:07  
5 from Cooley LLP on behalf of CoolIT as well as 09:07  
6 Corsair, and with me is my colleague Dustin Knight. 09:07  
7 THE VIDEOGRAPHER: Thank you. 09:07  
8 And I just have a quick question for the 09:07  
9 witness. Your screen went dark during the read-on. 09:07  
10 Is there any way to brighten it a little bit or? 09:07  
11 THE WITNESS: You know, I don't know why 09:07  
12 it's doing that. Let me see if I can kill lights 09:07  
13 behind me because it may be the -- the 09:07  
14 auto-contrast. I wish -- I wish there was a way to 09:07  
15 manually adjust contrast. Oh, this is much better. 09:07  
16 THE VIDEOGRAPHER: Okay. Great. Thank you. 09:07  
17 Yeah, that's better. Thanks. 09:07  
18 Janis, whenever you're ready. 09:07  
19  
20 DAVID TUCKERMAN, Ph.D.,  
21 the witness herein, was sworn and  
22 testified as follows:  
23 09:08  
24 DEPOSITION REPORTER: Thank you. 09:08  
25 Please begin, Counsel. 09:08

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1 MR. CHEN: Thank you, Miss Reporter. 09:08  
2  
3 EXAMINATION 09:08  
4 BY MR. CHEN: 09:08  
5 Q. Good morning, Dr. Tuckerman. How are you? 09:08  
6 A. Fine, thank you. 09:08  
7 Q. Great. Can you please state your full name 09:08  
8 for the record. 09:08  
9 A. David Bazeley Tuckerman. Middle initials -- 09:08  
10 middle name is spelled B-a-z-e-l-e-y. 09:08  
11 Q. Great. Thank you. 09:08  
12 A. Last name as it sounds, T-u-c-k-e-r-m-a-n. 09:08  
13 Q. Thank you. And can you please provide your 09:08  
14 home address, please. 09:08  
15 A. 12724 128th Avenue Northeast, Lake Stevens, 09:08  
16 S-t-e-v-e-n-s, Washington State 98258. 09:09  
17 Q. Okay. Thank you. And, Dr. Tuckerman, have 09:09  
18 you had your deposition taken before? 09:09  
19 A. A long time ago. 09:09  
20 Q. Okay. And how many times have you been 09:09  
21 involved in a deposition? 09:09  
22 A. Three prior times. 09:09  
23 Q. Three prior times. 09:09  
24 And were those three prior times all with 09:09  
25 respect to a patent case? 09:09

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1       the right one. So we're talking about the '330                   13:45  
2       patent specifically right now?                                   13:45  
3       Q.     That's correct, yeah.                                   13:45  
4       A.     Ok.  
5       Q.     And if you -- if you want, we can go through 13:45  
6       claim 1.   13:46  
7       A.     Just a moment, please.                           13:46  
8       Q.     Uh-huh.   13:46  
9       A.     Okay. All right. So I have -- I mean,           13:46  
10      Exhibit A, chart 1, obvious in view of Antarctica,   13:46  
11      so that's my position.                                   13:46  
12      Q.     Right. Again, that's -- so yes, so let me 13:46  
13      just repeat the question.                               13:46  
14   13:46  
15      So do the Antarctica pictures and                   13:46  
16      discussions in the user manual render obvious each 13:46  
17      and every element of the asserted claims of the '330 13:46  
18      patent?   13:46  
19   13:46  
20      MS. BHATTACHARYYA: Objection. Calls for a 13:46  
21      legal conclusion. Mischaracterizes the record. And 13:46  
22      mischaracterizes Dr. Tuckerman's report on       13:46  
23      invalidity of the '330 patent.                   13:46  
24   13:46  
25      THE WITNESS: So the user manual isn't the 13:46  
whole story. I mean, I had to examine it myself to, 13:46  
you know, render these conclusions. I wouldn't have 13:46  
been able -- you know, I wouldn't have done it just 13:46

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1 based on not seeing the device. 13:47

2 BY MR. CHEN: 13:47

3 Q. Are you aware that Asetek has produced 13:47

4 videos of Antarctica in this case? 13:47

5 A. I was not aware of that. 13:47

6 Q. Okay. So you haven't seen those videos; 13:47

7 correct? 13:47

8 A. That is correct. 13:47

9 Q. Let's turn to paragraph 57 of your report. 13:47

10 Why don't you go ahead and read that paragraph and 13:47

11 let me know when you're finished. 13:47

12 A. Okay. All right. 13:48

13 Q. Okay. You've had a chance to review 13:48

14 paragraph 57; correct? 13:48

15 A. Yeah, I have. 13:49

16 Q. Okay. And you state in paragraph 57 that 13:49

17 the space between adjacent fins is about 0.9 to 1 13:49

18 millimeter; correct? 13:49

19 A. Yes. 13:49

20 Q. What evidence do you point to in your report 13:49

21 for this opinion? 13:49

22 A. Well, okay. So first there is Eriksen's 13:49

23 deposition; however, I didn't think that was 13:49

24 sufficient to be something I was going to swear to, 13:49

25 so I wanted to inspect the device personally. And I 13:49

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1 used like -- I used calipers to measure the fins at 13:49  
2 the base which is where I felt the most relevant 13:49  
3 dimension was because the base of the fins is where 13:49  
4 the most heat transfer occurs. 13:49

5 As fins -- you go up in fin height, they 13:50  
6 become less effective. And so to me, the base was 13:50  
7 the relevant dimension to measure it at. And I got 13:50  
8 readings, you know, between 9.9 and 1.0, so I was 13:50  
9 okay with that. 13:50

10 Q. Did you make those measurements prior to 13:50  
11 submitting your report or after you submitted your 13:50  
12 report? 13:50

13 A. I made them prior. 13:50

14 Q. Okay. Did you record those measurements 13:50  
15 anywhere? 13:50

16 A. I did not, no. 13:50

17 Q. And you don't include any evidence of those 13:50  
18 measurements in your report; correct? 13:50

19 A. No. I felt that the readings were close 13:50  
20 enough that I didn't need to -- that combined with 13:50  
21 the -- you know, Eriksen's testimony and my own 13:50  
22 measurements. I did -- I will say that after I saw 13:51  
23 the rebuttal report from Dr. Pokharna, I got 13:51  
24 concerned. He measured the fins at the top; I had 13:51  
25 measured them at the bottom. 13:51

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1           I would say that when you -- the           13:51  
2 measurement -- first of all, I would have expected   13:51  
3 fins to be larger at the top, that is an inherent -- 13:51  
4 channel widths to be larger at the top. That's an   13:51  
5 inherent feature of machining. And the technique   13:51  
6 that Dr. Pokharna used to measure is subject to   13:51  
7 error if you, you know, apply excessive force to   13:51  
8 the -- you know, to it because the copper is very, 13:51  
9 very soft. And so the slightest little bit of force 13:51  
10 will put an indentation in the copper and give you a 13:51  
11 high reading.   13:52

12           But, you know, I had the additional concern 13:52  
13 that, you know, was there any further corroboration, 13:52  
14 you know, besides my own measurements at the base. 13:52  
15 And counsel provided me a picture of the machining 13:52  
16 document for the Antarctica device, and it showed 13:52  
17 them with -- it showed the blades that they say they 13:52  
18 used with calipers measuring that blade.              13:52

19           And they to got -- it was 0.93 millimeters 13:52  
20 on the -- on the blade, because these were solid 13:52  
21 grooves. And so -- and then the box on the -- that 13:52  
22 was next to it that the blades was identified with a 13:52  
23 legend that led me to believe that it was a blade 13:53  
24 that was intended to give you a nominal 1-millimeter 13:53  
25 cut.   13:53

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1                   And that made sense to me because you always 13:53  
2 get a cut that's wider than your blade. And so a 13:53  
3 blade that is nominally designed to cut metal at 1 13:53  
4 millimeter might well be 0.93 millimeters wide. So, 13:53  
5 you know, I, you know, concluded that, okay, it was 13:53  
6 designed for nominally 1 millimeter and I got 13:53  
7 measurements at the base 0.91. Dr. Pokharna got 13:53  
8 higher measurements, I know that. 13:53

9                   But, you know, I did say the space between 13:53  
10 the adjacent pins is about a 0.9 to 1.0. I didn't 13:53  
11 say precisely. I didn't take it out to the next 13:54  
12 decimal digit. So that's all the information I have 13:54  
13 on the microchannel spacing. 13:54

14                 Q. But none of the information that you're 13:54  
15 referring to is actually cited and included in your 13:54  
16 report; correct? Other than Dr. -- excuse me, 13:54  
17 Mr. Eriksen's deposition testimony? 13:54

18                 A. Well, that's right. Because I didn't -- at 13:54  
19 the time I thought that was good enough. You know, 13:54  
20 I had his -- Eriksen's information and I had my own 13:54  
21 measurements at the base, and I didn't think there 13:54  
22 was going to be a dispute on the issue, so I didn't 13:54  
23 pursue it further. 13:54

24                 Q. Did you see that Mr. Eriksen in his 13:54  
25 deposition said that 0.6 to 0.8 was his best guess? 13:54

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1 A. Well, yeah, I did see that. 13:54  
2 Q. Uh-huh. Did you speak with Mr. Eriksen 13:54  
3 before you signed your expert report? 13:54  
4 A. No. I had never spoken with Mr. Eriksen. 13:54  
5 Q. Okay. 13:54  
6 A. As I said, I wasn't relying on -- I wouldn't 13:54  
7 have signed a report relying just on his say so. 13:55  
8 That's why I measured them myself. And in point of 13:55  
9 fact, they were larger than -- than his 13:55  
10 recollection. 13:55  
11 Q. And to your knowledge, did Mr. Eriksen 13:55  
12 measure Antarctica's channel widths? 13:55  
13 A. I don't know what he did. Like I said, I've 13:55  
14 never had contact with him. 13:55  
15 Q. Okay. 13:55  
16 A. And I'll also mention I don't know that the 13:55  
17 device I got is representative. I mean, you know, 13:55  
18 there is manufacturing variations. So, you know, 13:55  
19 this is one sample. Why did they have the sample; 13:55  
20 maybe it was a reject they happened to have lying 13:55  
21 around out of spec. I just don't know. You know, I 13:55  
22 only know what I measured. 13:55  
23 Q. Right. There is no way for you to say with 13:55  
24 certainty that the channel widths of the Antarctica 13:56  
25 device that was on sale prior to August 9, 2007 was 13:56

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1                   THE VIDEOGRAPHER: That's Exhibit Share           18:47  
2 which I'm not in charge of. I think Janis can help.       18:47  
3 If you want to share an exhibit, I've enabled you to       18:47  
4 share the screen.   18:47

5                   MS. BHATTACHARYYA: I would have to mark       18:47  
6 that exhibit as well. So, Janis, do you -- do you       18:47  
7 know what would be the best way of handling this?       18:47

8                   THE VIDEOGRAPHER: Should we go off the       18:47  
9 record.   18:47

10                  MR. CHEN: Off the record.                       18:47

11                  MS. BHATTACHARYYA: Sure.                       18:47

12                  THE VIDEOGRAPHER: We're going off the       18:47  
13 record at 6:47 p.m. This is the end of media 8.       18:47

14                  (Off the record.)                               18:51

15                  THE VIDEOGRAPHER: We are on the record at   18:57  
16 6:57 p.m. This is the beginning of media 10 in the   18:57  
17 deposition of Dr. David Tuckerman.                       18:57

18                  (Exhibit 275 marked for identification.)   18:57

19 BY MS. BHATTACHARYYA:                                       18:57

20 Q. Dr. Tuckerman, I just marked as Exhibit 275, 18:57  
21 a document that -- it's an Asetek document, and I'm   18:58  
22 sharing that on the screen now so that counsel and   18:58  
23 you can see it.   18:58

24 Do you -- do you see -- do you see that on       18:58  
25 the screen? It's marked as Exhibit 275.               18:58

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1 MR. CHEN: I object to the introduction of 18:58  
2 this exhibit. It was not included in 18:58  
3 Dr. Tuckerman's report. It was not identified in 18:58  
4 any materials considered by Dr. Tuckerman. It is 18:58  
5 late. It is improper to be introducing this exhibit 18:58  
6 as part of this deposition. I reserve all rights to 18:58  
7 move to strike it and all the rights with respect to 18:58  
8 expunging it. 18:58

9 BY MS. BHATTACHARYYA: 18:58

10 Q. Dr. Tuckerman, earlier in your deposition 18:58  
11 when CoolIT and Corsair's counsel was questioning 18:58  
12 you, you mentioned at looking at a machining 18:58  
13 document. Is Exhibit 275 the document that you were 18:58  
14 referring to? 18:59

15 MR. CHEN: And, Counsel, can I just get a 18:59  
16 continuing objection on this exhibit? 18:59

17 MS. BHATTACHARYYA: Sure. 18:59

18 THE WITNESS: Yes, I recall you show -- you 18:59  
19 showing this to me. 18:59

20 BY MS. BHATTACHARYYA: 18:59

21 Q. And is this Exhibit 275 the document that 18:59  
22 you referred to as the Asetek machining document 18:59  
23 earlier in your deposition? 18:59

24 MR. CHEN: Objection. Leading in addition 18:59  
25 to my standing objection. 18:59

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1 THE WITNESS: It is what I referred to, yes. 18:59

2 BY MS. BHATTACHARYYA: 18:59

3 Q. You said that this document show -- showed 18:59  
4 you that the tool that was used to -- 18:59

5 (Clarification requested by reporter.) 19:00

6 BY MS. BHATTACHARYYA: 19:00

7 Q. To machine the microchannels in the 19:00  
8 Antarctica had a width of 0.93 millimeter. Do you 19:00  
9 recall that? 19:00

10 MR. CHEN: In addition to my standing 19:00  
11 objection, leading. 19:00

12 THE WITNESS: Would you repeat the question, 19:00  
13 please. 19:00

14 BY MS. BHATTACHARYYA: 19:00

15 Q. Earlier in your deposition you said that 19:00  
16 Exhibit 275 showed you a tool that was -- that is, 19:00  
17 based on your understanding, the tool that was used 19:00  
18 to machine the microchannels in the Antarctica 19:00  
19 device. You do you recall that? 19:00

20 MR. CHEN: In objection -- in addition to my 19:00  
21 standing objection, objection. Leading. 19:00

22 Mischaracterizes testimony. 19:00

23 THE WITNESS: Yes. It's my understanding 19:01  
24 that it's Asetek's assertion that this is the blade 19:01  
25 that was used to cut the microchannels, and it is 19:01

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1 evident from the picture that it had a diameter of 19:01  
2 0.93 millimeters, which -- and then the box that 19:01  
3 it's showing below, you may want to zoom out a 19:01  
4 little bit, the -- Asetek asserts that that box 19:01  
5 contains, I believe, the saw blades. 19:01

6 And the labeling on the box, I am making 19:01  
7 an inference from the 50-by-1-by-13, that the 50 is 19:01  
8 probably a blade diameter, and the 1 refers to the 19:01  
9 thick -- the nominal thickness of the cut that it's 19:02  
10 supposed to make. In other words, you know, if 19:02  
11 you're trying to make a nominal 1-millimeter cut, 19:02  
12 you're going to use a blade that is thinner than 19:02  
13 that because there's what's called a kerf width that 19:02  
14 you always get when you cut. So it always -- you 19:02  
15 always end up with a groove that's a little larger 19:02  
16 than your blade. But that blade would be consistent 19:02  
17 with the kind of channels I saw on Antarctica. 19:02

18 BY MS. BHATTACHARYYA: 19:02

19 Q. And, Dr. Tuckerman, in your answer, I 19:02  
20 believe you said the blades had a diameter of 0.93 19:02  
21 millimeters. Do you -- 19:02

22 A. I would -- of thickness. Thickness. 19:02  
23 Thickness. I'm sorry. 19:02

24 MR. CHEN: In addition to my standing 19:02  
25 objection, objection. Leading. Mischaracterizes 19:02

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1 testimony. 19:02

2 THE WITNESS: Yeah, I'm sorry, I -- yeah, I 19:02  
3 didn't think I said it had a diameter of 0.93, but 19:02  
4 if I did, I misspoke. It has -- they're measuring 19:03  
5 the thickness of the blade, 0.93 millimeter. 19:03

6 BY MS. BHATTACHARYYA: 19:03

7 Q. So the thick -- okay. Just so the record is 19:03  
8 clear, the thickness of the blade used to cut the 19:03  
9 microchannels in Antarctica is 0.93 millimeters; 19:03  
10 correct? 19:03

11 MR. CHEN: In addition -- in addition to my 19:03  
12 standing objection, objection. Leading. 19:03

13 THE WITNESS: Yeah. That -- that's the 19:03  
14 information Asetek is providing me, you know, or you 19:03  
15 and me. 19:03

16 MS. BHATTACHARYYA: Okay. I do not have any 19:03  
17 further questions for Dr. Tuckerman. 19:03

18 MR. CHEN: Let me take a five-minute break. 19:03

19 THE VIDEOGRAPHER: We are going off the 19:03  
20 record at 7:03 p.m. This is the end of media 10. 19:03

21 (Off the record.) 19:04

22 THE VIDEOGRAPHER: We are on the record at 19:05  
23 7:05 p.m. This is the beginning of media 11 in the 19:05  
24 deposition of Dr. David Tuckerman. 19:05

25 MR. CHEN: I do not have further questions 19:05

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

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I, DAVID TUCKERMAN, Ph.D., do hereby declare under penalty of perjury that I have read the foregoing transcript; that I have made corrections as appear noted, in ink, initialed by me, or attached hereto; that my testimony as contained herein, as corrected, is true and correct.

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EXECUTED this \_\_\_\_\_ day of \_\_\_\_\_,

2022, at \_\_\_\_\_, \_\_\_\_\_.

(City)

(State)

DAVID TUCKERMAN

1 I, JANIS JENNINGS, CSR No. 3942, Certified  
2 Shorthand Reporter, certify:

3 That the foregoing proceedings were taken  
4 before me at the time and place therein set forth, at  
5 which time the witness was duly sworn by me;

6 That the testimony of the witness, the  
7 questions propounded, and all objections and statements  
8 made at the time of the examination were recorded  
9 stenographically by me and were thereafter transcribed;

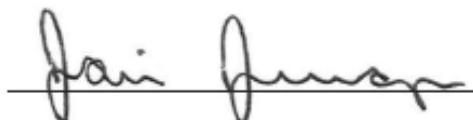
10 That the foregoing pages contain a full, true  
11 and accurate record of all proceedings and testimony.

12 Pursuant to F.R.C.P. 30(e) (2) before  
13 completion of the proceedings, review of the transcript  
14 [X] was [ ] was not requested.

15 I further certify that I am not a relative or  
16 employee of any attorney of the parties, nor financially  
17 interested in the action.

18 I declare under penalty of perjury under the  
19 laws of California that the foregoing is true and  
20 correct.

21 Dated this 4th day of January, 2022.

22   
23

24 JANIS JENNINGS, CSR NO. 3942

25 CLR, CCRR